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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/068,910	02/08/2002	Satoru Kawahara	020591	9398

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EXAMINER

PATTERSON, MARC A

ART UNIT PAPER NUMBER

1772

DATE MAILED: 08/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/068,910

Applicant(s)

KAWAHARA ET AL.

Examiner

Marc A Patterson

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 04 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### WITHDRAWN REJECTIONS

1. The 35 U.S.C. 112 second paragraph rejection of Claims 1 – 9, of record on page 2 of the previous Action, is withdrawn.

The 35 U.S.C. 102(b) rejection of Claims 1 – 20 as being anticipated by Kameyama et al (U.S. Patent No. 6,088,079), of record on page 3 of the previous Action, is withdrawn.

### NEW REJECTIONS

#### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 – 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kameyama et al (U.S. Patent No. 6,088,079) in view of Nakajima et al (Japanese Patent No. 09113727).

With regard to Claims 1 – 3 and 17 – 20, Kameyama et al discloses an optical film (layer comprising an optical element; column 14, lines 9 – 10) comprising a polarizing film having a protective layer on at least one side of a polarizer (column 11, lines 14 – 17) and a brightness enhancement film laminated to the polarizing film (a Grandjean structured liquid crystal polymer layer having a circular polarization separating function, therefore a reflecting and polarization separating function; column 4, lines 58 – 67); Kameyama et al fail to disclose the property of having a flexural rigidity such that when the film is subjected to a test in which the film is cut

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into a 25 mm by 150 mm strip shape and bent so that both ends of the film approach each other and the distance between both ends is 50 mm, a force of 0.163 N or less applied to the film.

Nakajima et al teach that it is well – known in the art to adjust the thickness and Young's modulus of an optical film to obtain a desired flexural rigidity (paragraphs 0014 – 0015, English translation) for the purpose of obtaining a film having the desired flexibility (paragraph 0015, English translation). The desirability of adjusting the flexural rigidity of Kameyama et al, which is an optical film, would therefore be obvious to one of ordinary skill in the art.

Therefore one of ordinary skill in the art would have recognized the utility of varying the flexural rigidity to obtain a flexibility. Therefore, the flexibility would be readily determined through routine optimization of flexural rigidity by one having ordinary skill in the art depending on the desired end use of the product.

It therefore would be obvious for one of ordinary skill in the art to vary the flexural rigidity in order to obtain a desired flexibility, since the flexibility would be readily determined through routine optimization by one having ordinary skill in the art depending on the desired end result as shown by Nakajima et al.

With regard to Claim 4, the brightness enhancement film disclosed by Kameyama et al has a circular polarizing separating function as discussed above and therefore has a linear polarizing separating function.

With regard to Claim 5, the polarizing film and brightness enhancement film disclosed by Kameyama et al are laminated by an adhesive layer (column 14, lines 30 – 40).

With regard to Claim 6, the liquid crystal polymer layer disclosed by Kameyama et al is supported on a layer of cellulose based – film (therefore a disposed on a protective layer of the film; column 5, lines 25 – 34).

With regard to Claim 7, the thickness of the protective layer of the polarizing film and brightness enhancement film disclosed by Kameyama et al are 50  $\mu\text{m}$  or less (column 5, lines 63 – 66). With regard to Claim 8, the film further comprises a retardation film (column 10, lines 54 – 62) and viewing angle enlarging film (the use of a multilayer structure increases viewing angle; column 6, lines 1 – 13).

With regard to Claims 9 – 16, the optical film disclosed by Kameyama et al is comprised in a liquid crystal display comprising a liquid crystal cell (column 2, lines 27 – 29).

With regard to Claims 21 and 23, a pressure sensitive adhesive is provided on the optical member disclosed by Kameyama et al (column 15, lines 11 – 16) and is therefore exposed to a surface of the optical member.

With regard to Claims 22 and 24, the pressure sensitive adhesive disclosed by Kameyama et al is temporarily covered with a separator (column 15, lines 1 – 4).

#### ANSWERS TO APPLICANT'S ARGUMENTS

4. Applicant's arguments regarding the 35 U.S.C. 103(a) as being unpatentable over Kameyama et al (U.S. Patent No. 6,088,079) in view of Nakajima et al (Japanese Patent No. 09113727), of record on page 2 of the previous Action, have been considered but have not been found to be persuasive for the reasons set forth below.

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Applicant argues, on page 7 of Paper No. 12, that Nakajima et al is not relevant to Kameyama et al because Nakajima et al teaches a film made of one layer, whereas the film disclosed by Kameyama et al comprises several layers.

However, as stated above, both Kameyama et al and Nakajima et al are optical films, therefore the teaching by Nakajima et al that it is known in the art to adjust the flexural rigidity of an optical film to obtain a desired flexibility is relevant to Nakajima et al.

Applicant also argues on page 7 that Nakajima et al does not teach adjusting the flexural rigidity of an optical film comprising a polarizing plate and a brightness enhancement film, and does not teach that the adjustment is applicable to a purpose other than resistance to dimensional change in the assembled display.

However, as stated above, the film disclosed by Kameyama et al, which comprises a polarizing plate and a brightness enhancement film and the film taught by Nakajima et al are optical films, therefore the teaching by Nakajima et al that it is known in the art to adjust the flexibility of an optical film to obtain a desired flexibility is relevant to Nakajima et al. Furthermore, flexural rigidity is an intrinsic property of the film, and it is unclear why the adjustment of the flexural rigidity of an optical film to obtain a desired flexibility is not applicable to any intended use for which a particular flexibility is desired.

Applicant also argues on page 8, that Nakajima et al is not relevant to the claimed invention, because Nakajima et al addresses the problem of dimensional change due to heating, whereas the claimed invention addresses the problem of workability.

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However, the workability of the invention is not claimed. Furthermore, as stated above, it is unclear why the adjustment of the flexural rigidity of an optical film to obtain a desired flexibility is not applicable to any intended use for which a particular flexibility is desired.

Applicant also argues on page 8 that one of ordinary skill in the art would not have found in Nakajima et al a suggestion to adjust a flexural rigidity of the claimed optical film, because that person could not have correlated the physical properties of the single layer film, so as to avoid dimensional change.


However, the meaning of the term 'correlated' is unclear. As stated above, both Kameyama et al and Nakajima et al are optical films, therefore the teaching by Nakajima et al that it is known in the art to adjust the flexural rigidity of an optical film to obtain a desired flexibility is relevant to Nakajima et al.

### *Conclusion*

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc Patterson, whose telephone number is (571) 272 – 1497. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM. If attempts to reach the examiner by phone are unsuccessful, the examiner's supervisor, Harold Pyon, can be reached at (571) 272 – 1498. FAX communications should be sent to (703) 872-9310. FAXs received after 4 P.M. will not be processed until the following business day.

Marc A. Patterson, PhD.

*Marc Patterson*  
Art Unit 1772

  
HAROLD PYON  
SUPERVISORY PATENT EXAMINER  
*1772*

*8/3/04*